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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,854	04/15/2004	Chien-Chao Huang	24061.150/TSM2003-0964	6844
42717	7590	01/24/2007		
HAYNES AND BOONE, LLP 901 MAIN STREET, SUITE 3100 DALLAS, TX 75202			EXAMINER DICKEY, THOMAS L	
			ART UNIT 2826	PAPER NUMBER
			MAIL DATE 01/24/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/824,854

Applicant(s)

HUANG ET AL.

Examiner

Thomas L. Dickey

Art Unit

2826

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 13 December 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

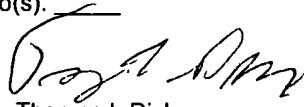
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 17-27.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s).
13. ☐ Other: _____.


Thomas L. Dickey
Primary Examiner
Art Unit: 2826

Continuation of 11. does NOT place the application in condition for allowance because:

It is argued, at page 3 of the remarks, that "MPEP 706.07(a) specifies that an Office Action shall not be final "where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement." However, the section Applicant cites is not the first and foremost purpose stated by MPEP 706.07(a). First and foremost, MPEP 706.07(a) specifies that, "Under present practice, second or any subsequent actions on the merits shall be final..." (emphasis added). This section of the MPEP is intended to implement Office policy that every applicant gets "two bites of the apple," the first being Applicant's claims as initially filed, the second, applicant's amended claims. This policy has been extensively commented on (see, e.g., *Intellectual Property Law for Engineers and Scientists*, Howard B. Rockman, 2004 (Wiley Interscience, Chicago, Illinois), page 188) and the Examiner is frankly surprised that Applicant is unfamiliar with it. As the commentaries make plain, any substantive amendment made subsequent to first action on the merits, but prior to the filing of an RCE, qualifies as "applicant's amendment," as that phrase is used in section 706.07(a).

It is further argued at page 3 that "In the prior Office Action mailed July 18, 2006, the Examiner presented an anticipation rejection under 35 U.S.C. §102, based on Lin U.S. Patent Application Publication No. 2005/0224786. Then, in a Response filed on August 11, 2006, Applicants presented a detailed argument against this § 102 rejection. In the present Office Action, the Examiner repeats the same § 102 rejection... but fails to comply with the MPEP §707.07 requirement that the Examiner must 'take note of the applicant's argument and answer the substance of it' Accordingly, it is respectfully submitted that the present Office Action is not complete, and therefore must be withdrawn and replaced with a new and complete Office Action that complies with MPEP 707.07(f)."

This Office mailed to Applicant, on 8/29/06, a one thousand four hundred and fifty-three word letter, responding with specificity to each and every argument raised by Applicant in the August 11, 2006 response he now claims went un-remarked upon.

Applicant's argument seems to be that section 707.07(f), after stating, "the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it," goes on to require, without stating so much in words, that the examiner's answer must be made in a particular manner, in a particular place, and at a particular time. This argument is essentially the same as Applicant's argument that MPEP 706.07(a) requires (without plainly stating) that "applicant's amendment of the claims," must be made at a particular time in order to satisfy 706.07(a). The examiner rejects both arguments. If the authors of the MPEP wished to impose requirements not currently plainly stated therein, they could have re-written the MPEP, as they so often have.

It is argued, at page 4 of the remarks, that "the Examiner asserts that the 'electrode' recited in Claim 17 is met by the gate 402 and the silicide 802 in Figure 9B." This is true, but the Examiner also plainly states the electrode 402-802 is part of a patterned feature formed from electrode 402-802 and spacer 805. Further, one must remain cognizant of the fact that Abadeer discloses (paragraph 0083) "[t]he silicide growth process consumes some of the silicon of ... the gate 402." Thus Abadeer makes clear that sill ("silicide" as Abadeer refers to it) 802 bears the same sort of relationship to electrode 402-802 as the relationships born between tarnish and a silver spoon, or between the Statue of Liberty's rich green patina and the Lady herself.

It is further argued at page 4 that "However, in Figure 9B, an electrically insulating oxide layer 306 is disposed between the gate 402 and each of the two silicide regions 802. In other words, the gate 402 is electrically separated from each of the silicide regions 802." This would be a more compelling argument if Abadeer disclosed exactly two silicide regions and Applicant were discussing each and every possible region 802 that might form the sill portion of electrode 402-802. However, as is clear from the O.G. figure, Abadeer discloses at least three silicide regions: one is part of body contact 710 (a mesa), one is part of source/drain 606/607, and one is formed as part of patterned feature 805-802-402, sill 802 within the upper portion of electrode 402-802. The silicided portion of source 606 is the silicide Applicant complains of as being separated from gate 402-802 by gate oxide 306. One having skill in the art would, of course, instantly recognize that proper operation of the transistor requires all of source 606-802 (including the silicided portion 802 of source 606-802) to be electrically separated from gate 402-802.

It is further argued at page 4 that "If the silicide 802 is considered to be a 'sill', then it is not disposed 'within' any electrode. On the other hand, if the silicide 802 is considered to be an 'electrode', then there is no separate and distinct structure within it that could reasonably be considered to be 'sill'." However, as Abadeer explains in paragraph 0082, a portion (but not all) of the electrode formerly (see figure 7) labeled "402" is converted to silicide in order to form a silicide "sill" 802 within said electrode, said electrode henceforth being identified as "402-802." The electrode is 402-802 (which started its life as a simple silicon electrode labeled "402"). Within electrode 402-802 are located, firstly, "non-sill" 402, and secondly, "sill" 802.

It is argued, at page 6 of the remarks, that "In more detail, with reference to paragraph 32 and Figure 2 of the present application, Figure 2 discloses a biasing feature 250 (such as a transistor gate electrode) that is made of a conductive material (such as doped polysilicon). The conductive feature 250 has a sill 250a located in it. On the other hand, and contrary to the assertions in the Office Action, the sills in Figure 2 of Lin are not disposed within a conductive material, but instead are disposed within a semiconductor material."

The Examiner hereby takes Official Notice that polysilicon (the material Applicant admits makes up the conductive material of his own Figure 2 electrode) is a semiconductor material (the material Applicant insists makes up the non-conductive material of Lin's Figure 2 electrode). Given the fact that polysilicon is a semiconductor material, Applicant's argument is sense-free.

It is argued, at page 7 of the remarks, that "MPEP §706.02(j) sets forth some of the requirements that an Examiner must meet in order to establish a prima facie case of obviousness under 35 U.S.C. §103." The Examiner disagrees. The Examiner believes that 383 U.S. 1, et seq. set forth the legal requirements of a prima facie case of obviousness under 35 U.S.C. §103. In the Examiner's view, it would be a grievous error to find a claim non-obvious if met the test of MPEP §706.02(j), but failed the test of 383 U.S. 1.

With regard to Applicant's page 7-8 arguments, it is first noted that in paragraph 0054 Montgomery et al. specifically states, "In each of the embodiments of FIGS. 2-5, layer 10 can be thought of as the 'body' region of the modulator device and regions 12, 20, 22 or 24 can be thought of as the 'gate' region of the modulator device." This would tend to lead one to speculate that Montgomery et al. intended to incorporate, by reference, the gate-body relationship of Montgomery et al.'s first (figure 2, by Applicant's reckoning) and second (figure 3) embodiments into Montgomery et al.'s third (figures 4 and 16) embodiments. In paragraph 0067, Montgomery et al. state, "figure 18 (the figure Applicant alleges is a "fourth embodiment") illustrates a variation of the structure of figure 17." Earlier in the same paragraph, Mont-

Montgomery et al. explain that the figure 17 structure is itself a variation of the figure 16 (third embodiment) structure. This would tend to lead one to speculate that Montgomery et al. intended to incorporate, by reference, the entire structure of figure 16 (including the previously incorporated 1st and 2nd embodiments) into the so-called "fourth embodiment."

Montgomery et al.'s apparent belief that they successfully incorporated the elements of embodiments 1-3 into embodiment 4 makes it extremely difficult to use MPEP §706.02(j) to frame the instant claims as obvious over Montgomery. Montgomery et al. do not bother to describe how the underpinnings of the fourth embodiment are made except by incorporated reference. MPEP §706.02(j) assumes that there would be differences between Montgomery et al.'s figure 18 device and the claimed device. Unfortunately, the only way to build Montgomery et al.'s figure 18 device, in the first place, is to use the teachings of figures 2-5, 16, and 17. There are no differences between the figure 18 device, built using the teachings of figures 2-5, 16, and 17, and the claimed device.

This is where Applicant and Examiner have what must be characterized as a philosophical difference. The only way to bring the fourth embodiment into existence is to rely on the first three embodiments. Once in existence, said fourth embodiment is identical to the claimed device. In the paper mailed 7/18/06 the Examiner characterized the relationship between the fourth embodiment and the claim as one of anticipation. Applicant met this characterization with a violent protest. Applicant's view was that the fact of the fourth embodiment's reliance on the first three embodiments meant that it could only render the claim obvious. In a concession to Applicant's feelings, the Examiner re-characterized the relationship in terms of obviousness.

Is it error to characterize a claim as obvious over an anticipatory reference? The CCPA did not think so. See *In re Kalm*, 378 F.2d 959, 962 (CCPA 1967) (holding "a complete description" to be "the ultimate or epitome of obviousness.") This holding is presumably binding on today's Court of Appeals, and today's BPAI. One should also keep in mind that the Graham Court (in 383 US 1) found that "as the courts below found, all of the elements in the '798 patent are present in the Glencoe structure.... The mere shifting of the wear point to the heel of the '798 hinge plate from the stirrup of Glencoe-itself a part of the hinge plate-presents no operative mechanical distinctions," (383 US at 6), indicating that the Court apparently believed Glencoe disclosed each and every limitation of the '798 patent. The Court identifies differences between Glencoe and '798 but it does not identify these differences as patentable differences. It is difficult for the Examiner to believe that the Graham Court intended to make identifying "the difference or differences in the claim over the applied reference" (MPEP §706.02(j)) a legally required prerequisite (as applicant implies) to a finding of obviousness, given that the Court did not itself perform such a step while finding the '798 patent obvious.

It is argued, at page 9 of the remarks, that Montgomery et al. do not disclose a "transistor." In Montgomery et al. a gate, separated from a body by a gate insulator, modulates current in said body. This arrangement, as previously explained, is considered, prima facie, to be a disclosure of a transistor under a logical principle known as looks-like-a-duck/quacks-like-a-duck/is-a-duck. Applicant is free to rebut this prima facie finding with evidence. As previously explained, such evidence must be placed in the record. Assertions, such as "Persons skilled in the art are well aware of what a transistor is, are well aware of what an electro-optic modulator is, and are also well aware that an electro-optic modulator is different from a transistor," embedded in argument of counsel cannot take the place of evidence in the record. In *re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965). See MPEP §§ 716.01(c), 2145.